



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/679,075	10/03/2003	Steven Durham	40120-10024	3549

33771 7590 07/09/2007  
PAUL D. BIANCO: FLEIT, KAIN, GIBBONS,  
GUTMAN, BONGINI, & BIANCO P.L.  
21355 EAST DIXIE HIGHWAY  
SUITE 115  
MIAMI, FL 33180

EXAMINER

A, PHI DIEU TRAN

ART UNIT PAPER NUMBER

3637

MAIL DATE DELIVERY MODE

07/09/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/679,075	<b>Applicant(s)</b> DURHAM, STEVEN	
	<b>Examiner</b> Phi D. A	<b>Art Unit</b> 3637	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 07 March 2007.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 21-29 and 31-41 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 21-29, 31-41 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 21-24, 28-29, 31-41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dinwoodie(D408554) in view of Hiroshi (3278811), Kowalski(5570000) and Ho.

Dinwoodie shows a shelter/carport capable of producing electrical energy comprising a canopy defining a sheltered area thereunder, the shelter area including at least one vehicle parking space (the space beneath the shade system inherently is able to accommodate a vehicle parking there), a supporting structure (the posts) connected to the supporting the canopy and permitting substantially unobstructed access by a vehicle to the sheltered area, a photovoltaic device associated with the canopy, the device capable of producing an electrical current when exposed to sunlight (per the solar electric which means converting solar power to electrical power), the shelter having no walls, the device is supported by the canopy, the device is on the canopy, the device forming the canopy (inherently so as the device is part of canopy structure), the device producing DC electrical current when exposed to sunlight, the canopy including an upper surface having a first voltaic device, a lower surface.

Dinwoodie does not show an electrical load operatively connected to the first and second device for utilizing the electricity generated by the device when the device is exposed to light, a second photovoltaic device on the lower surface of the canopy and directed toward the ground to

Art Unit: 3637

receive light from the light source, the second device is able to produce an electrical current when exposed to light, a light emitting diode device.

Hiroshi discloses the use of both sides of a structure to enable the generation of electricity on both sides of a structure from sunlight.

Kowalski discloses a canopy having an electrical load operatively connected to an energy generating device.

HO discloses the use of either LED or OLED to display information.

It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Dinwoodie's structure to show an electrical load operatively connected to the first and second device for utilizing the electricity generated by the device as taught by Kowalski, a first photovoltaic device on an upper surface and a second photovoltaic device on the lower surface of the canopy and directed toward the ground to receive light from the light source to generate electricity as taught by Hiroshi, a light emitting diode device as taught by Ho because having the electricity connected to an electrical load would enable the usage, storage per battery, and distribution of the electricity generated by the solar electric shade, and the use of the connection of a load to the electricity is well known in the art as is demonstrated by existing use of solar panels, and having a second photovoltaic device associated with the underside of the canopy and directed toward the ground would enable the increased production of electricity to the structure as the structure is able to receive light with a larger surface area, and it would have been obvious to one having ordinary skill in the art to show the load being LED since LED is a well known device for lighting structure while conserving energy generated by the device.

Art Unit: 3637

Per claim 23-24, Dinwoodie as modified further shows the devices being supported by the canopy, contained on or in or form the canopy.

Per claim 28, Dinwoodie as modified further shows an artificial light source associated with the underside of the canopy, the second photovoltaic device being directed toward the ground to receive light from the light source, the upper surface of the canopy being oriented to receive sunlight directly.

Per claim 29, Dinwoodie as modified shows all the claimed limitations except for the light source being dispersed within the second voltaic device.

It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Dinwoodie's modified structure to show the light source being dispersed within the second voltaic device because having the artificial light source within the second voltaic device would have been an obvious matter of engineering design choice to satisfy a particular appearance need for the structure, and the use of the artificial light within the second voltaic device would provide the same function of lighting an area as having the artificial light source on the outside of the second voltaic device.

3. Claims 25-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dinwoodie (D408554) in view of Hiroshi (3278811), Kowalski(5570000) and Ho as applied to claim 21 above and further in view of Albright et al (5674325).

Dinwoodie as modified shows all the claimed limitations except for the first and second photovoltaic devices being selected from the group consisting of crystalline photovoltaic systems, flexible thin film photovoltaic systems, stacked photovoltaic layers and photovoltaic and light emissive layers.

Art Unit: 3637

Albright et al discloses photovoltaic device being transparent (col 6 lines 23-24), the device being composed of multiple layers of flexible thin film transparent photovoltaic material.

It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Dinwoodie's modified structure to show the device being selected from the group consisting of crystalline photovoltaic systems, flexible thin film photovoltaic systems, stacked photovoltaic layers and photovoltaic and light emissive layers because crystalline systems, flexible thin film systems are normally used material for producing electricity as taught by Albright et al

Per claims 26-27 , Dinwoodie as modified further shows the photovoltaic devices being transparent , the devices being composed of multiple layers of flexible thin film transparent photovoltaic material.

### ***Response to Arguments***

1. Applicant's arguments with respect to claims 21-29, 31-39 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

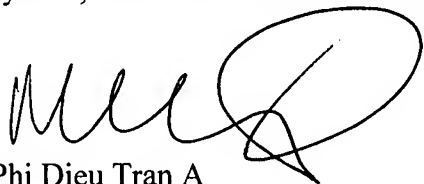
The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The prior art shows different solar panel device.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phi D A whose telephone number is 571-272-6864. The examiner can normally be reached on Monday-Thursday.

Art Unit: 3637

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lanna Mai can be reached on 571-272-6867. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, consisting of stylized cursive letters, with a large loop at the end.

Phi Dieu Tran A

5/29/07